This striking species is still known only from the series originally studied, taken on the lake shore on low tangled vegetation between the water and a thick growth of Custard-apple trees.

15. **Forficula auricularia** Linnaeus.

1758. *F[orficula]auricularia* Linnaeus, Syst. Nat., Ed. X, I, p. 423 [Europe.]

1853. *Forficula auricularia* Fieber, Lotos, III, p. 254. [Exotic record; America.] (First American record.)

Rhode Island: Kingston, XII, 6, 1912, (A. E. Steene), 1♂, 1♀, [U. S. N. M.]; Newport, late VI, 1914, (R. W. Glaser), 5 juv., [A. N. S. P. and Hebard Cln.].

This insect has been previously reported from the United States from adventive material. It has recently become permanently established in New England, the species appearing in great numbers out of doors at Newport, Rhode Island.

In addition to the species considered above, a specimen of *Spandex percheron* (Guerin and Percheron), adventive in Massachusetts, was first described as *Spongophora bipunctata* by Scudder, then recorded as *Forficula percheroni* by Scudder and later as *Psalis percheroni* by Caudell.

Some North American Anthomyiidae (Dipt.).

By O. A. Johannsen, Cornell University, Ithaca, New York.

Since the appearance of my paper on New Eastern Anthomyiidae* I have noted several novelties, among them the male of *Dialyta flavitibia* which was kindly sent to me by Mr. C. W. Johnson. The discovery of the male of this species confirms my generic determination. I have also found the male of the *Hylephila*,† mentioned in my previous paper, which enables me to give a description of the species.

Hammomyia paludis n. sp.

♂.—Length 5-6 mm. Head black, silvery gray pruinose with black reflections; in profile the genae are about 0.4, the buccae about 0.6, the

*Trans. Amer. Ent. Soc., XLII: 385.

†*Hylephila* appears to be preoccupied in Lepidoptera. The genus may be merged with *Hammomyia* as has already been done by Stein.

width of one eye; about 8 setae on each side of the front; four or five incurved setae below vibrissae, setae on the lower part of the buccae long and fine, though sparse. Face concave in profile, oral margin distinct; antennae black, third segment nearly twice as long as the second, not reaching the oral margin by a distance of over half the length of this segment; arista noticeably thickened at the base, short pubescent to the tip. Frontal stripe dull black, at the narrowest point but little broader than the diameter of the anterior ocellus; orbits gray pruinose, each at the narrowest point over half as wide as the frontal stripe in the same section; proboscis and palpi fuscous.

Thorax black, brownish gray pruinose, with three black vittae, the laterals on line with the dorso-central setae. Inner d. c. (acrostichals) small, in two rows; d. c. 2+3; st. 1+2, long; "pra" fine, about a third as long as the following seta. Scutellum with a pair of strong basals, strong subapicals, small apicals, slender discals, besides some finer discal hairs; pubescence of the lower surface restricted to a few fine pale hairs.

Abdomen gray pruinose, each segment more fuscous at the base and with a median fuscous line narrowing at the posterior margin. The abdomen is more or less cylindrical, wedge-shaped posteriorly, each segment with long slender setulae both dorsally and ventrally, dorsal marginal setae distinctly stronger than the discal setulae; fifth sternite with a wide and deep triangular notch similar to that figured by Schnabl and Dziedzicki for *H. janowskii* (Pl. 26, fig. 691). The hypopygium closely resembles that of *H. unilineata* as figured by these authors on plate 5, figs. 79, 80.

Legs black, gray pruinose; femora with long fine setae, strongest on the lateral surfaces of the hind pair; fore tibiae each with two outer lateral extensor setae; middle tibiae each with five, one of which is on the basal third on the posterior extensor side, the others, nearly on a level beyond the middle, one anterior, one posterior, one outer, and one inner seta; hind tibiae each with two or more outer lateral flexor, four large outer extensor, three large posterior extensor, and five or more fine inner flexor, setae. Tarsal claws long, setulose at the base, about as long as the pulvilli.

Wings brownish gray hyaline, veins brown; costal spines small but distinct; veins R 4+5 and M 1+2 parallel or very slightly converging at the tip; extreme tip of R 4+5 slightly reflexed; R 1 ends opposite the r-m crossvein; m-cu crossvein slightly sinuous, perpendicular to Cu 1; penultimate section of M 1+2 is about two-thirds as long as the ultimate section. Squamae yellow-tinged, upper one covers the lower; halteres dark yellowish.

♀.—Like the male, except that the antennae are a little shorter; the lower posterior sterno-pleural seta is much shorter than the upper; "pra" about half as long as the following seta. Setulae of the abdomen

stout, but not as long as in the male. Apex of the ovipositor with the upcurved spines characteristic of the females of this genus. Hind tibiae lack the fine setae of the inner flexor surface. Last section of M 1+2 only about a fifth or a fourth shorter than the penultimate. The size is quite variable, ranging from 4 to 7 mm. in length.

Type (male) from Melrose Highlands, Massachusetts, in my collection. Paratypes from Melrose Highlands, Massachusetts, and Ithaca, New York, Melrose Highlands Laboratory and Cornell University collections. April and May.

Some specimens in Dr. J. M. Aldrich's collection from Lafayette, Indiana, differ only in having a much larger "pra," in having numerous setulae among the acrostichals, and more abundant and larger setulae upon thorax and abdomen. This species differs from *H. maculata* St., in the chaetotaxy of the legs and in the structure of the hypopygium of the male; from *H. unilineata* it differs in having narrower genae, in the form of the fifth sternite and in size. *H. maculata* has not yet been taken in New York; my previous reference to it should be applied to *H. paludis*.

PROSALPIA.

This genus resembles *Hammomyia* and *Hylephila* in having an elongate anal vein, a pilose lower surface of the scutellum, and narrow front in both sexes, but differs from the former in having a bare or pubescent arista and from both in not having the head inflated. The two species recorded from North America in Aldrich's catalogue may be distinguished as follows.

a. Thorax and abdomen shining black, without pruinosity. Female. *arcuate* Walker.

aa. Thorax brownish gray with darker vittae; opaque. *silvestris* Fall.

There is a female specimen in the Cornell University collection from Truro, Nova Scotia, of the second species which I cannot distinguish from my European specimen. Walker (List, IV) described three species from Canada, which Stein, with a slight doubt in each case, considers synonymous with *sylvestris*. A study of the descriptions reveals but trifling differences.

LISPOCEPHALA.

The species of this anomalous genus were formerly grouped with *Coenosia* to which they bear a striking resemblance in the arrangement of the sterno-pleural setae, setae of the posterior tibiae, wing venation, and in the spotted abdomen. The genus is now placed among the *Limnophorinae*. The front is broad in both sexes as in *Lispa*, and the fulcrum of the hypopygium of the male is directed forward. The species thus far known to occur in the United States may be separated as follows.

a. Crossvein not clouded.

b. Middle tibia with a bristle on the anterior side; costal spine present; wing with a brownish tinge. Ohio, New Hampshire, *verna* Fabr.

bb. Middle tibia with no seta on the anterior side; costal spine not distinct.

c. Wing of the male milky white. Many localities in the United States....*erythrocera* R. D. (= *lacteipennis* Zett. IV, 1722).

cc. Wing of the male grayish hyaline. Massachusetts, var. of *erythrocera* ?

aa. Crossveins clouded; middle tibia with no seta on the anterior side. Orono, Maine.....*alma* Meigen, var. *pallipalpis* Zett. (b).

There is another *lacteipennis* Zett. (IV. 1586), a species not yet recorded from the United States, which should not be confused with *L. erythrocera* (= *lacteipennis* Zett., IV. 1722). The former species is now placed in *Dexiopsis*, a Coenosine genus. Specimens of *L. alma* were taken at Orono, Maine, in October. I have referred these specimens to var. *pallipalpis* Zett. (b) because the abdomen is but faintly translucent at the base and at the apical margins of the first and second segments.

Limnophora torreyae Joh.

In the original description of this species a misprint occurs. The post sutural d.c. setae are four and not three in number. In some specimens the orbits are not quite contiguous, being separated by a slender frontal line.

Mydaea pectinata Joh.

In the original description of this species, fourth line from the top, page 393, substitute for the words "tibia with a row" the words "tibia with an irregular double row."

Phaonia nigricans Joh.

The genus *Phaonia,* as at present defined by recent European workers, is distinguished from *Mydaea* by the presence of a seta on the posterior median extensor surface. If this interpretation be adopted the specific name noted above which I assigned to one of our New York species need cause no confusion. If, however, the emphasis be placed upon the presence or absence of the pilosity of the eyes, redistributing the species into the two groups corresponding to the genera *Hyetodesia* and *Spilogaster,* then the name *nigricans* becomes a homonym, having been assigned to another species by Stein in 1897. For the benefit of those who prefer the latter grouping of species I suggest that the name **cayugae** be adopted to replace my *nigricans.*

An additional locality record for this species is McLean, Tompkins County, New York.

Dialyta flavitibia Joh.

♂.—Like the female except that it is a trifle smaller (6 mm.); the front is about as wide as one eye, somewhat narrowing at the base of the antennae; buccae narrower and antennae longer and broader than in the female; orbits about half as wide as the frontal stripe at the lower ocellus. Abdominal setae longer and stouter than in the female; five pairs of marginal setae on each of segments two and three and six pairs on the fourth, five pairs of discals on the third and fourth segments; all sternites visible. Femoral setae stronger and more numerous; tibial setae as in the female except that those of the hind legs on the outer lateral flexor side are more uniform in size. Crossveins only faintly tinged; one large costal spine; R 4+5 more arched upward. The hypopygium somewhat resembles that of *D. atriceps* as figured by Schnabl and Dziedzicki (Pl. 21, figs. 555, 556). In our species, however, the fulcrum has, in addition to the laterals, a small median tubercle on the ventral side; the inferior forceps are stouter, and the superior forceps are quite different, being deeply cleft, resembling those shown in fig. 493 (Pl. 19), but with the median angles rounded, not produced. The fifth sternite differs but little from that figured for *D. atriceps.*

This specimen was taken at Danbury, Connecticut, in June, and sent to me by Mr. C. W. Johnson. There is a female specimen in the Cornell Collection from Ohio, and Mr. Johnson writes me that the species also occurs in Pennsylvania and Ontario.